



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/657,053	09/05/2003	Eduard F. Boeckmann	TDH-043	1848

29106 7590 03/14/2007
GROOVER & HOLMES
BOX 802889
DALLAS, TX 75380-2889

EXAMINER

PARRIES, DRU M

ART UNIT	PAPER NUMBER
----------	--------------

2836

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/14/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/657,053	BOECKMANN, EDUARD F.	
	Examiner	Art Unit	
	Dru M. Parries	2836	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6 is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date. _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed December 18, 2006 have been fully considered but they are not persuasive. Regarding the newly added amendment to claim 1, Sashida teaches a first feedback path (including voltage detector 300) that is connected to a remote load (4), and a second parallel feedback path (connected to 201) not being directly connected to any remote loads and it inherently has a faster response than the first path since it receives the output signal from the power converter first.

Regarding the newly added amendment to claim 8, Sashida teaches an additional feedback loop (including voltage detector 300) that is connected to the power converter (100) and the remote load (4).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 8 is rejected under 35 U.S.C. 102(b) as being anticipated by Sashida et al. (5,257,180). Sashida teaches connecting a remote load (4) to a loop (11) to a power converter (100). He teaches devising an impedance (405a) for a feed back loop (including 406a) according to the cross current. He also teaches connecting the feed back loop to the power converter, wherein the feedback loop is closer to the converter than the load. He also teaches an additional

Art Unit: 2836

feedback loop (including voltage detector 300) that is connected to the power converter (100) and the remote load (4). (Fig. 1)

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 5 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sashida et al. (5,257,180). Sashida teaches connecting a remote load (4) to a loop (11) to a power converter (100). He also teaches connecting a feed back loop to the power converter, where the feedback loop consists of two paths in parallel. The first path being one with the voltage detector (300) and the second path connected to the current sensor (201) (Fig. 1). The first path being connected to the remote load, and the second path not being directly connected to a remote load and the second path inherently has a faster response than the first path since it is closer to the power converter's output signal. He also teaches an error amplifier (403) connected to the feedback loop (Col. 14, lines 23-32). Sashida fails to teach a plurality of remote loads. It would have been obvious to one of ordinary skill in the art at the time of the invention to add more loads to the output of the circuit since it has been held that mere duplication of the essential working parts of a device has no patentable significance unless a new and unexpected result is produced. *In re Harza*, 124 USPQ 378.

Art Unit: 2836

6. Claims 2 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sashida et al. (5,257,180) as applied to claim 1 above, and further in view of Balakrishnan et al.

(2005/0141246). Sashida teaches a power supply device as described above. Sashida fails to teach a feedback path including a low-pass filter or a capacitor-resistor network. Balakrishnan teaches a voltage feedback path including a low-pass filter comprising a capacitor-resistor network ([0029], lines 1-4; Fig. 1). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate a low-pass filter into the voltage feedback path of Sashida's invention so that it could filter out the voltage spikes.

7. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sashida et al.

(5,257,180) as applied to claim 1 above, and further in view of Komatsuzaki (JP 06-038537).

Sashida teaches a power supply device as described above. Sashida fails to teach a feedback path including a high-pass filter. Komatsuzaki teaches a voltage feedback path including a high-pass filter (Constitution). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate a high-pass filter into the voltage feedback path of Sashida's invention so that it could filter out signals that are too low and could be misinterpreted.

8. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sashida et al.

(5,257,180) as applied to claim 1 above, and further in view of De Groot (6,465,992). Sashida

teaches a power supply device as described above. Sashida fails to teach a feedback path

including a band-pass filter. De Groot teaches a voltage feedback path including a band-pass

filter (Abstract). It would have been obvious to one of ordinary skill in the art at the time of the

Art Unit: 2836

invention to incorporate a band-pass filter into the voltage feedback path of Sashida's invention so that it will reduce the ripple voltage around the passband.

Allowable Subject Matter

9. Claim 6 is allowed.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dru M. Parries whose telephone number is (571) 272-8542. The examiner can normally be reached on Monday -Thursday from 9:00am to 6:00pm. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus, can be reached on 571-272-2800 x 36. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DMP

3-6-2007


CHAU N. NGUYEN
PRIMARY EXAMINER